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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,794	07/18/2000	James Norman Cawse	RD-26357	8865

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EXAMINER

FRIEND, TOMAS H F

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 05/06/2003

286

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,794

Applicant(s)

CAWSE, JAMES NORMAN

Examiner

Tomas Friend

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26,29 and 31-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26,29 and 31-34 is/are allowed.
- 6) ☒ Claim(s) 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Detailed Action

Status of the Application

A response to an office action was received on 30 January 2003 (Paper No. 23).

Status of the Claims

Claims 26, 29, and 31-35 are pending and examined on their merits.

Remarks

The examiner acknowledges that the last office action was mailed to the wrong address. At the time of the mailing of the last office action (02 December 2002), the Power of Attorney and Change of Correspondence Address received on 27 August 2002 had not been entered. The examiner regrets the inconvenience that this caused applicant and applicant's representative.

Withdrawn Rejections and Objections

1. All outstanding rejections and objections are withdrawn in response to applicant's amendment.

New Grounds of Rejection - 35 U.S.C. 102/103

The statutory basis for each of the following rejections may be found in a prior office action.

Initially it is noted that intended use language in an apparatus claim is not given patentable weight. An apparatus disclosed in the prior art that possesses all of the claimed structural limitations is inherently capable of being used in the same manner as the claimed apparatus.

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2. Claim 35 is rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, as being unpatentable over Frey U.S. Patent 5,563,095 (October 1996).

The Frey patent discloses an apparatus and method for the continuous manufacturing of semiconductor devices by sequential processing (column 4, lines 8-28). Column 11, lines 34-38, discloses that the process can be contained in one or more chambers (i.e. vessels) with airlocks separating the chambers through which a ribbon bearing semiconductor wafers may be threaded (i.e. the airlocks are part of charge ports and discharge ports for entry and exit of the ribbon).

Figure 4 and column 12, lines 11-56, discloses that processed wafers are separated by cutting before being spooled onto a take up drum. This process would inherently require the detection of wafers (product) to avoid cutting through the wafers. Column 13, lines 9-52, describes figure 6, which discloses a wafer loading airlock 502 leading into a set of chambers (i.e. a vessel comprising chambers) and a wafer unloading airlock 538 for removing wafers. Computer control of various synthesis steps is disclosed, for example, in columns 8 and 14.

The small number of different types of valves used for airlocks is small. One would have immediately envisaged the use of ball valves as well as gate valves with the apparatus. Alternatively, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to use ball valves or other functional equivalents as desired by one making the apparatus. One would have been motivated to use a ball valve, for example, because a ball valve is durable and easily opened and closed.

3. Claim 35 is rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, as being unpatentable over Gross et al. U.S. Patent 5,020,237 (June 1991).

The Gross et al. patent discloses an apparatus for dehydrating fruit (abstract). Column 4, lines 39-55, and figures 1 and 15 disclose that the apparatus comprises a vacuum chamber, a conveyor belt for moving samples of fruit through the chamber, and airlock valves. Since the entire chamber is under vacuum, one would immediately have envisaged an airlock at the exit end of the chamber. Claim 1 recites a chamber defining an elongated cavity having an inlet end (charge port) and an outlet end (discharge port), and controlling means for controlling infrared energy and microwave energy to produce desired temperature gradients. Claim 4 recites the limitation of a moisture meter at the outlet to sense the moisture of the product. Claim 5 recites a

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moisture meter in a rest zone within the chamber. Column 9, lines 30-33, discloses a series of observation ports (detectors) on either side of the drier.

The small number of different types of valves used for airlocks is small. One would have immediately envisaged the use of ball valves as well as gate valves with the apparatus.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to use ball valves or other functional equivalents as desired by one making the apparatus. One would have been motivated to use a ball valve, for example, because a ball valve is durable and easily opened and closed.

Allowable Subject Matter

4. Claims 26, 29, and 31-35 are allowed.


As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tomas Friend** at telephone number **(703) 308-4548**. The examiner's normal schedule is four, ten-hour days per week including Saturdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (703) 306-3217. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-2742.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1235.

Tomas Friend, Ph.D.
23 April 2003


ANDREW WANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600